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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,928	12/03/2004	Franz-Leo Heinrichs	2002DE114	7440

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CLARIANT CORPORATION
INTELLECTUAL PROPERTY DEPARTMENT
4000 MONROE ROAD
CHARLOTTE, NC 28205

EXAMINER

BRUNSMAN, DAVID M

ART UNIT	PAPER NUMBER
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1755

MAIL DATE	DELIVERY MODE
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06/13/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/516,928	Applicant(s) HEINRICHS ET AL.	
	Examiner David M. Brunzman	Art Unit 1755	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,8,10-19,21 and 27-30 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,8,10-19,21 and 27-30 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

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The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 4, 6, 8, 10-13 and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "long-chain" is indefinite as it is relative to an unexpressed comparison. While applicant's response indicates that an unrecorded search turned up many instances of the use of the term, there is no evidence of record that the term, as used in the instant claims, are a definite and art recognized meaning such that one of ordinary skill in the art would clearly understand exactly how "long" the hydrocarbon chain must be to fall within the scope of the term. Claims 8 and 1-12 recite species of the component "A", "ester wax" recited in claim 1 wherein the wax has been derivatized to the extent it is no longer clear that it would be recognized by one of ordinary skill in the art as an "ester wax". For example, the waxes of claim 12 would be recognized as amide waxes.

Claim 21 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The instant specification does not disclose compositions of inks, plastics, crop protection preparations of lubricants having 40-90% "A". The instant specification only discloses materials having the ingredient proportions in the ranges recited in claim 21 that are the finely ground wax mixtures, *per se*. The examples of the instant specification disclose a maximum of 2% by weight wax additive in said compositions.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 3-6, 13-19, 21 and 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 0164776 (US 2003/0050381 A1, being the English equivalent).

The reference examples teach a composition comprising a polypropylene film (plastic) including an additive comprising finely ground wax, the wax including a polyolefin wax made using a metallocene catalyst. In preferred embodiments these metallocene waxes are used in a blend with other additives, including ester waxes, to enhance the dispersing action of the metallocene waxes (paragraph [0016]) in proportions sharing a common endpoint with the instant claims of 99% (paragraph [0050]). The preferred additives include the ester waxes of the instant claims including montan waxes, paragraph [0039-0040], sorbitan ester of saturated fatty acids, paragraph [0044], polyolefin copolymer ester waxes reacted with maleic anhydride, [0043], amide waxes derived from ethylene diamine or ammonia reacted with a fatty acid such as stearic acid, [0037] and, Fischer-Tropsch waxes, [0038].

The difference between this document and the instant claims is that the examples do not include mixtures including ester waxes. The reference teaches that finely ground wax mixtures improve the dispersion of colorant in plastic matrices and the combination with the preferred auxiliaries enhances the dispersing action. It would have been obvious to one of ordinary skill in the art to employ a mixture of finely ground polyolefin wax and ester wax because the reference explicitly teaches that the combination would be expected to improve dispersing action.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1, 3-5, 13-19, 21, 27 and 30 are rejected under 35 U.S.C. 102(a) as being anticipated by WO 0185855 (US 2003/0154885 A1 being the English equivalent).

The reference examples (Table 2, see M1, M10 and M11) teach a composition comprising a coating composition including an additive comprising finely ground wax, the wax including a polyolefin wax made using a metallocene catalyst [0049] and up to 50% ester wax. In that there is no reason to suspect the recited coating compositions would be unusable in any printing process (for example, wood-block printing) the disclosed composition is considered to fully anticipate the recitation of "printing ink" in the instant claims. Absent evidence to the contrary, the term "printing ink" is construed as a recitation of intended use there being no evidence of record that particular compositional limitations are necessarily included by such term. Furthermore, the finely ground wax composition disclosed in the reference itself is considered to anticipate the term "plastics" in that a wax is "plastic" as being capable of continuous and permanent change in shape in any direction without breaking apart. These metallocene waxes are used in a blend with other additives, including ester waxes to improve the properties of coating materials [0043-0044] in proportions sharing a common endpoint with the instant claims of 99% (paragraph [0066]). The preferred additives include the ester waxes of the instant claims including montan waxes, paragraph [0055-0056], sorbitan ester of saturated fatty acids, paragraph [0060], polyolefin copolymer ester waxes reacted with maleic anhydride, [0059], amide waxes derived from ethylene diamine or ammonia reacted with a fatty acid such as stearic acid, [0053] and, Fischer-Tropsch waxes, [0054].

Claims 6, 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 0185855 (US 2003/0154885 A1 being the English equivalent).

The difference between this document and the instant claims is that the examples do not include mixtures including ester waxes comprising a copolymer of long chain olefins having 5-18 carbon atoms and of unsaturated acids such as maleic anhydride (claims 28 and 29). The reference teaches that finely ground wax mixtures comprising metallocene waxes and these same ester waxes improve the properties of coating materials in combination. It would have been obvious to one of

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ordinary skill in the art to employ a mixture of finely ground polyolefin wax and the ester waxes recited in the instant claims because the reference explicitly teaches that the combinations would be expected to improve scratch resistance, abrasion resistance, pigment dispersion, pigment stability, sedimentation, pigment redispersion, pigment orientation, flattening, feel, lubricity, metal marking, pigment incorporation, rheology, blocking resistance, sandability, and degassing (See paragraphs [0004-0020]).

Applicant's response filed 23 March 2007 has been carefully considered. Applicant's response to the rejection under section 112 is fully addressed above. The rejections over US 4342602 are withdrawn in view of the amendments filed. The rejection over US 2003/0154885 is maintained for the reasons set forth above. The rejection under section 103 over US 2003/0050381, alone is newly appropriate in view of the amendments filed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David M. Brunsman whose telephone number is 571-272-1365. The examiner can normally be reached on M, Th, F, Sa; 7:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

David M Brunsman
Primary Examiner
Art Unit 1755

DMB

A handwritten signature in black ink, appearing to read 'David M Brunsman', with a long horizontal stroke extending to the right.